Listing of Claims:

Claims 1-3 (cancelled).

Claims 4-11 (withdrawn).

12. (new) A microchip comprising a plurality of cDNA molecules expressed in hematopoietic cells, the molecules selected for an analysis of hematopoietic tissue.

13. (new) The microchip of claim 12, wherein the hematopoietic tissue is selected from the group consisting of bone marrow, peripheral blood, stem cells, transplanted marrow, and leukemia cells from human and related primates including baboon.

14. (new) The microchip of claim 12, wherein the plurality of cDNA molecules is designated by unique identifiers as shown in Appendix A.

15. (new) The microchip of claim 13, wherein the plurality of cDNA molecules is designated by a subset of the unique identifiers as shown in Appendix A.

16. (new) The microchip of claim 12, wherein the analysis is to determine if prior to transplantation, a bone marrow will engraft for transplantation.

17. (new) The microchip of claim 12, wherein the analysis is to expand a stem cell graft *ex vivo*.

18. (new) The microchip of claim 12, wherein the analysis is to determine changes in gene expression in hematopoietic cells following pharmacological manipulations.

19. (new) The microchip of claim 12, wherein the analysis is to identify novel genes involved in hematopoiesis.

20. (new) The microchip of claim 12, wherein the analysis is to diagnose hematopoietic cancers. 10. The microchip of claim 1, wherein the analysis is to determine if modifications altered expression levels of the cDNA molecules in the microchip.

21. (new) The microchip of claim 20, wherein the modifications include gene therapy and treatment with growth factors.

22. (new) A microchip comprising a data set selected from a database, the data set comprising nucleotide sequences of a plurality of cDNA molecules expressed in hematopoietic cells, the molecules selected for an analysis of hematopoietic tissue.